WHAT IS CLAIMED IS:

1. A monoclonal or polyclonal antibody having high affinity for a peptide selected from the group consisting of: Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

2. The antibody of claim 1, wherein said antibody is a monoclonal antibody.

3. The antibody of claim 1, wherein said antibody has high affinity for the peptide Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1).

4. The antibody of claim 2, wherein said antibody has high affinity for the peptide Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1).

5. The antibody of claim 1, wherein said antibody has high affinity for the peptide Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4).

6. The antibody of claim 2, wherein said antibody has high affinity for the peptide Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4).

7. The antibody of claim 1, wherein said antibody has high affinity for the peptide Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

8. The antibody of claim 2, wherein said antibody has high affinity for the peptide Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

9. The antibody of claim 1, wherein said antibody is cross-reactive with each of peptides Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

10. The antibody of claim 2, wherein said antibody is cross-reactive with each of peptides Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

11. A method for detecting magnesium binding defect comprising:

a) measuring in blood serum the level of peptide having an amino acid sequence selected from the group consisting of: Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2); and

b) comparing said level to a standard,

wherein a reduced level of said peptide is indicative of said magnesium binding defect.

12. The method of claim 11, wherein said level of peptide is measured by using an antibody to peptide having an amino acid sequence selected from the group consisting of: Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

13. The method of claim 12, wherein the antibody is monoclonal.

14. The method of claim 13, wherein the monoclonal antibody cross reacts with each of said peptides.

15. The method of claim 12, wherein the antibody is employed in an immunoenzyme assay.

16. The method of claim 15, wherein the immunoenzyme assay is enzyme-linked immunosorbent assay to quantitate the concentration of said peptide in blood serum.

17. The method of claim 12, wherein the antibody is polyclonal.

18. A method for correcting magnesium binding defect of an individual comprising administering to said individual peptide having an amino acid sequence selected from the group consisting of: Phe-Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:1), Phe-Xaa-Gly-Leu-Met-NH_2, where Xaa is variant Phe or Val (SEQ ID NO:4), and Phe-Gly-Leu-Met-NH_2 (SEQ ID NO:2).

19. The method of claim 18, wherein said peptide is administered in an amount sufficient to correct magnesium binding defect.

20. The method of claim 19, wherein the peptide is administered intravenously.